

REMARKS

Claims 1, 3, 8-11, 13, 16, 19, 22 and 24-33 are pending in this application. Claims 1 and 8-11 are amended. Claims 2, 4-7, 12, 14-15, 17-18, 20-21, and 23 are canceled. Claims 29-33 are new. Claims 1, 3, 8-11, 13, 16 19, 22 and 24 are rejected.

Submission of Priority Document

Submitted herein is an English translation of Korean Patent Application No. 10-2002-0060683 filed on October 4, 2002 in the Korean Intellectual Property Office (KIPO).

Claim Rejections under 35 U.S.C. § 101

The Examiner rejects claims 1, 3 and 24 under 35 U.S.C. 101 alleging that because the computer readable medium is not employed as a computer component it is not statutory. The Applicants respectfully traverse.

The Examiner appears to be under the mistaken impression that "functional descriptive material" must be employed as a computer component in order to be statutory. This is simply incorrect. The Applicants submit "[a] computer readable medium having a data structure for managing reproduction of graphic data by a reproducing apparatus," as recited in claim 1, is clearly statutory subject matter as explained in MPEP § 2106.01. In detail, MPEP § 2106.01 states:

When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (discussing patentable weight of data structure limitations in the context of a statutory claim to a data structure stored on a computer readable medium that increases computer efficiency) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim)

with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory).

Functional descriptive material recorded on a computer readable medium, therefore, is statutory. With respect to functional descriptive material, the Applicants also note that MPEP § 2106.01 states:

In this context, “functional descriptive material” consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of “data structure” is “a physical or logical relationship among data elements, designed to support specific data manipulation functions.” The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) “Nonfunctional descriptive material” includes but is not limited music, literary works and a compilation or mere arrangement of data.

(emphasis added)

Therefore, a data structure which imparts functionality when employed as a computer component is an example of functional descriptive material, per MPEP § 2106.01. The Applicants emphasize that the data structure recited in claim 1 is used for “managing reproduction of graphic data by a reproducing apparatus,” therefore, claim 1’s data structure, in the words of MPEP § 2106.01 “imparts functionality when employed as a computer component.” Accordingly, the Applicants submit claim 1’s data structure is functional descriptive material.

Because the functional descriptive material recorded on a computer-readable medium is statutory (per MPEP § 2106.01), and because claim 1’s data structure is functional descriptive material (per MPEP § 2106.01), the Applicants submit “[a] computer readable medium having a data structure for managing reproduction of graphic data by a reproducing apparatus,” as recited in claim 1, is clearly statutory subject matter.

Additionally, the Applicants direct the Examiner to “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility,” Annex IV(a), page 52, which states:

A claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized and **is thus statutory.**

Accordingly, the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" clearly recognize that computer-readable mediums provided they are encoded with a data structure are statutory.

For at least the reasons given above, the Applicants respectfully request the rejection of claim 1, and all claims which depend thereon, under 35 U.S.C. § 101 as being non-statutory. withdrawn.

Claim Rejections under 35 U.S.C. § 103

Claims 1, 3, 8, 9, 10, 11, 13, 16, 19, and 22 rejected under 35 U.S.C. §103(a) as being unpatentable over Seo et al (US 2002/0,006,273 A1), further in view of Kim et al (US 7,072,401 B2) and further in view of Ando et al (EP 1,021,048 A2). The Applicants respectfully traverse.

The Applicants submit claim 1 is patentable over the cited art for at least two reasons: 1) neither Seo nor Ando, individually or in combination, disclose "each transport packet in a graphic segment has a same packet identifier (PIP)," as recited in claim 1; and 2) the combination of Seo, Kim, and Ando does not disclose, at least, "at least one transport packet in the graphic segment includes an identifier that the transport packet is part of a graphics packet," as recited in claim 1.

Initially, the Applicants note the Examiner relied on Kim to disclose "each transport packet in a graphic segment has a same packet identifier (PID)," as recited in claim 1. However, in light of perfecting the claim to priority, by submitting a translation of the priority document the Applicants submit the Examiner can no longer rely on Kim as prior art in a section 103 rejection.

Regarding priority, the Applicants note that Korean Patent Application No. 10-2002-0060683, was filed on October 4, 2002. Kim, on the other hand,

was filed on September 26, 2002 and published on April 24, 2003. Because Kim was published after the filing date of Korean Patent Application No. 10-2002-0060683, Kim cannot qualify as prior art under 35 U.S.C. § 102(a). Because Kim was filed less than one year before the filing date of Korean Patent Application No. 10-2002-0060683, Kim cannot qualify as prior art under 35 U.S.C. § 102(b). Kim may qualify as prior art only under 35 U.S.C. § 102(e).

According to 35 U.S.C. § 103(c)(1), subject matter which qualifies as prior art only under 35 U.S.C. § 102(e) may not be used in a 103 rejection when the subject matter and the claimed invention were subject to an obligation of assignment to the same person. The inventors of the Kim patent and the inventors of the present application were both under an obligation of assignment to LG Electronics at the time the invention disclosed in the present application was made. Accordingly, the Applicants submit that Kim may not be used as prior art pursuant to 35 U.S.C. § 103(c)(1).

As discussed above, the Examiner relied on Kim to disclose, "each transport packet in a graphic segment has a same packet identifier (PID)," as recited in claim 1. The Examiner admits, on page 4 of the Office Action, that Seo does not disclose this feature, therefore, Seo cannot be relied to render this feature obvious. The Examiner has not alleged, nor can the Applicants find, this feature disclosed in Ando, accordingly, the Applicants submit Examiner has not established the above feature is *prima facie* obvious without Kim.

For at least the above reason, the Applicants respectfully request the rejection of claim 1, and all claims which depend thereon, under 35 U.S.C. § 103 as being obvious over Seo in view of Kim in further view of Ando be withdrawn.

For similar reasons, the Applicants respectfully request the rejection of claim 8-11, and all claims which depend thereon, under 35 U.S.C. § 103 as being obvious over Seo in view of Kim in further view of Ando be withdrawn.

In addition, the Applicants submit the Examiner failed to establish the combination of Seo, Kim, and Ando renders claim 1 obvious, because none of the references, alone or in combination, disclose "at least one transport packet

in the graphic segment includes an identifier that the transport packet is part of a graphics packet," as recited in claim 1. The Examiner alleges this feature is disclosed in paragraphs 51-52, 71-76, and FIG. 5 of Ando. The Applicants respectfully disagree.

The Examiner alleges the packet ID=0xbd meets the above claim limitation because the ID identifies the packet as part of itself. However, the Applicants point out that the packet ID=0Xbd is used to identify a data compression method, MPEG2 (see paragraph [0052]) rather than "an identifier that the transport packet is part of a graphics packet," as recited in claim 1. For at least this reason the Applicants submit the Examiner has failed to render the above feature recited in claim 1 obvious.

The Examiner also alleges that the continuous packet flag disclosed in Ando also meets the above claim limitation because the ID identifies TS packets extending across the next packet. However, the Applicants point out that continuous flag is used to identify whether a portion of the previous packet is stored in the next packet or not. Accordingly, this flag cannot be relied on for disclosing "an identifier that the transport packet is part of a graphics packet," as recited in claim 1. For at least this reason the Applicants submit the Examiner has failed to render obvious "at least one transport packet in the graphic segment includes an identifier that the transport packet is part of a graphics packet," as recited in claim 1.

The Examiner has not alleged, nor can the Applicants find, the above feature disclosed in either Kim or Seo, accordingly, the Applicants submit that, even if combined, the combination of Kim, Seo, and Ando does not render "at least one transport packet in the graphic segment includes an identifier that the transport packet is part of a graphics packet," as recited in claim 1, obvious.

For at least the reasons given above, the Applicants respectfully request the rejection of claim 1, and all claims which depend thereon, under 35 U.S.C. § 103 as being obvious over Seo in view of Kim in further view of Ando be withdrawn.

For similar reasons, the Applicants respectfully request the rejection of claims 8-11, and all claims which depend thereon, under 35 U.S.C. § 103 as being obvious over Seo in view of Kim in further view of Ando be withdrawn.

In addition, the Applicants submit claim 11 is nonobvious over the combination of Seo in view of Kim in further view of Ando because none of the references, individually or in combination, disclose, at least “an encoder for encoding at least multiple reproduction path video data,” as recited in claim 11. The Examiner alleges this feature is disclosed in FIG. 13 of, however, this figure relates to seamless reproduction using an edit point and has no relation with the multiple reproduction path. Furthermore, this figure does not mention “reproduction path” at all. Accordingly, the Applicants submit the Examiner has failed to establish the above feature is *prima facie* obvious.

For at least the reason given above, the Applicants respectfully request the rejection of claim 11, and all claims which depend thereon, under 35 U.S.C. § 103 as being obvious over Seo in view of Kim in further view of Ando be withdrawn.

Claims 24-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seo et al (US 2002/0,006,273 A1), Kim et al (US 7,072,401 B2) and Ando et al (EP 1,021,048,A2), as applied to claims 1, 3, 8, 9, 10, 11, 13, 16, 19, 22 above, and further in view of Kikuchi et al (US 6,553,180 B1). The Applicants respectfully traverse.

As discussed above, because priority of the instant application has been perfected, the Applicants submit the Examiner cannot rely on Kim to render obvious “each transport packet in a graphic segment has a same packet identifier (PID),” as recited in claim 1. Further, the Applicants submit that Kikuchi fails to cure this deficiency. Accordingly, the Applicants submit that at least claim 24 is nonobvious over the combination of Kim, Ando, and Kikuchi at least by virtue of its dependency on claim 1. For similar reasons, the

Applicants submit claims 25-28 are nonobvious over the combination of Kim, Ando, and Kikuchi.

New Claims

Claims 29 – 33 are new and are considered patentable at least by virtue of their dependency upon their allowable base claims.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1 , 3, 8-11, 13, 16, 19, 22 and 24-33 in connection with the present application is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gary D. Yacura at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. §1.17; particularly, extension of time fees.

Respectfully submitted,

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By

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